

 US Army Corps of Engineers.	ADVANCED MODELING PxP - V4.0 SUBMITTAL REVIEW CHECKLIST (PxP CHX)			DATE
	CONTRACT NO.	TRANSMITTAL NO.	ITEM NO.	PROJECT PHASE
	PROJECT TITLE AND LOCATION			

SUBMITTER: See SUBMITTER INSTRUCTIONS, then complete SUBMITTER QC column.
REVIEWER: See REVIEWER INSTRUCTIONS, review SUBMITTER QC column and QCC comments, then complete REVIEWER QA column.

	COVER PAGE AND SECTION 1: PROJECT INFORMATION		SUBMITTER QC	REVIEWER QA
1.1.	Verify Project Information on the Cover Page and in Section 1 is correct and consistent with the Awarded Contract information and submitted ENG FORM 4025-R			
	a	'TRANSMITTAL NO.' on the Cover Page matches 'TRANSMITTAL NO.' on ENG FORM 4025-R		
	b	'FACILITY OWNER' on the Cover Page matches information on Awarded Contract		
	c	'PROJECT TITLE' on the Cover Page matches 'PROJECT TITLE' on ENG FORM 4025-R		
	d	'PROJECT LOCATION' on the Cover Page matches 'LOCATION' on ENG FORM 4025-R		
	e	'USACE CONTRACT NUMBER' on the Cover Page matches 'CONTRACT NO.' on ENG FORM 4025-R		
	f	As applicable, 'PROJECT NUMBER (PN)' on the Cover Page matches information in 'CONTRACT NO.'/'PROJECT TITLE AND LOCATION' on ENG FORM 4025-R		
	g	As applicable, 'OTHER AGENCY PROJECT CODE(S)' on the Cover Page matches information from USACE		
	h	A 'SUBMITTAL DATE' is provided on the Cover Page . It must coincide with the 'TRANSMITTAL DATE' if the PxP is submitted with an ENG FORM 4025-R		
	i	'PROJECT CONTRACTOR' on the Cover Page matches 'FROM' on ENG FORM 4025-R		
	j	The correct 'CONTRACT DELIVERY METHOD' is provided, e.g. DESIGN-BUILD, DESIGN-BID-BUILD, CONSTRUCTION, etc.		
	SECTION 2: KEY PROJECT CONTACTS		SUBMITTER QC	REVIEWER QA
2.1.	USACE/Agent Contacts			
	a	PROJECT MANAGER(S) contact information is provided		
	b	DISTRICT BIM/CIM MANAGER contact information is provided		
2.2.	Contractor Contacts for Advanced Modeling Activities			
	a	PROJECT MANAGER(S) contact information is provided		
	b	BIM/CIM MANAGER(S) contact information is provided		
	c	Discipline Advanced Modeling Leads are assigned and information is provided for each Discipline identified in Section 6.1, 'M3: Attachment 3, Tab 3' as being included in the project. Additional Disciplines may have been included.		
	SECTION 3: PROJECT MODEL USES		SUBMITTER QC	REVIEWER QA
3.1.	Mandatory Model Uses – this Section Check is covered under Check 3.3 below			
3.2.	Elective Model Uses. Any Elective Model Use content provided is considered non-contractual in nature and will not be negatively evaluated or critiqued by USACE, but MUST be properly addressed in Checks throughout specific to Project or Elective Model Uses			
	a	Each Elective Model Use has 'Process Description and Added-Value' content		
	b	Each Elective Model Use is identified with an (E) in the Section 3.3 Project Model Uses Table in the Design and Construct columns only		
3.3.	Mandatory Model Uses – See PxP Section 3.3 Project Model Uses Table for Checks 3.1.a and b.			
	a	Design Column: Mandatory Model Uses 'Design Authoring', 'Progress Reviews', and 'Interference Management (3D Coordination)' are marked with an (X) and shaded in red		
	b	Construct Column: Mandatory Model Uses 'Interference Management (3D Coordination)' and 'Record Modeling' are marked with an (X) and shaded in red		

	SECTION 3: PROJECT MODEL USES (continued)									SUBMITTER QC	REVIEWER QA
3.4.	Integration Of Project Model Uses In Other Sections										
	a	Project Model Uses information is included in the following Sections as applicable									
		4.1	4.2	5.1	5.2	8.2	9.1	9.2	11.2		
	SECTION 4: ORGANIZATIONAL ROLES/STAFFING									SUBMITTER QC	REVIEWER QA
4.1.	Design Phase Project Model Uses Table										
	a	Each Mandatory Model Use is shaded in red and information is provided									
	b	Each Elective Model Use identified in Section 3.3 has information provided									
4.2.	Construction Phase Project Model Uses Table										
	a	Each Mandatory Model Use is shaded in red and information is provided									
	b	Each Elective Model Use identified in Section 3.3 has information provided									
	SECTION 5: ADVANCED MODELING PROCESS DESIGN									SUBMITTER QC	REVIEWER QA
5.1.	Level One (L1) – Process Overview Map: Attachment 1										
	a	Each Project Model Use is included in the L1 – Process Overview Map									
	b	Each Discipline identified in Section 2.2 as being included in the project has been incorporated									
5.2.	Level Two (L2) - Detailed Process Maps: Attachment 2										
	a	Each Project Model Use has an L2 - Detailed Process Map									
	b	Each Discipline in Section 2.2 identified as being included in the project has been incorporated									
	SECTION 6: MINIMUM MODELING AND DATA REQUIREMENTS									SUBMITTER QC	REVIEWER QA
6.1.	Minimum Modeling Matrix (M3): Attachment 3										
	a	An M3 has been submitted in <u>Excel and PDF file formats</u>									
	b	Column ‘F’ on Tab ‘03. Scope-LOD-Grade’ has been completed per instructions									
	c	‘NOTES’ column is clear of variances concerning the Modeling Requirements and the Scope-LOD-Grade minimum specification									
6.2.	Modeling Enhancements (Optional)										
	a	Included enhancements exceed minimum requirements of the M3									
	SECTION 7: COLLABORATION PROCEDURES									SUBMITTER QC	REVIEWER QA
7.1.	Collaboration Strategy										
	a	‘Collaboration Strategy’ concisely describes how the Team will collaborate									
7.2.	Collaboration Activities										
	a	‘Collaboration Activities’ are completely identified and described in the table									
	SECTION 8: QUALITY CONTROL									SUBMITTER QC	REVIEWER QA
8.1.	Strategy for Quality Control										
	a	‘Strategy For Quality Control’ is concisely described									
8.2.	Quality Control Checks										
	a	All Quality Control Checks identified in the Contract are included and content has been provided									

	SECTION 8: QUALITY CONTROL (continued)		SUBMITTER QC	REVIEWER QA
8.3	Interference Management Coordination			
	a	'Interference Management Coordination' process is concisely described		
	b	Applicable Disciplines or Trades identified in Section 2.2 are included		
	c	'Color Coding Schemes' for the Coordination Model have been defined		
	d	Identified 'Acceptable Clash Types' and 'Justification' have been provided		
	e	An example of the Clash Test Naming Convention has been provided		
	SECTION 9: TECHNOLOGICAL INFRASTRUCTURE NEEDS		SUBMITTER QC	REVIEWER QA
9.1.	Design Phase Software for Project Model Uses			
	a	Each Mandatory Model Use is shaded in red		
	b	Each Mandatory Model Use, and each associated 'Discipline User' identified in Section 2.2, has applicable 'Software' and 'Version' information provided		
	c	'Design Authoring 'Software' and 'Version' comply with Contract requirements		
	d	Each Elective Model Use, and each associated 'Discipline User' identified in Section 2.2, has applicable 'Software' and 'Version' information provided		
	e	Model Use rows that are not applicable have been removed		
9.2	Construction Phase Software for Project Model Uses			
	a	Each Mandatory Model Use is shaded in red		
	b	Each Mandatory Model Use, and each associated 'Discipline User' identified in Section 2.2, has applicable 'Software' and 'Version' information provided		
	c	Record Modeling 'Software' and 'Version' comply with Contract requirements		
	d	Each Elective Model Use, and each associated 'Discipline User' identified in Section 2.2, has applicable 'Software' and 'Version' information provided		
	e	Model Use rows that are not applicable have been removed		
9.3.	Advanced Modeling Standards			
	a	'Versions' match Contract requirements		
	SECTION 10: ADVANCED MODELING ORGANIZATION		SUBMITTER QC	REVIEWER QA
10.1.	Model Structure			
	a	Model Structure has been described		
	b	Model Structure has been diagrammed		
10.2.	File Naming Standards			
	a	Example 'BIM' file names are provided for each Discipline identified in Section 2.2 as being included in the project		
	b	Example 'CIM' file names are provided for each Discipline identified in Section 2.2 as being included in the project		
	c	Example 'GIS' file name(s) is provided		
	d	Example 'CAD' file names are provided for each Discipline identified in Section 2.2 as being included in the project, and must comply with the 'Electronic drawing file naming conventions' Section of the latest A/E/C CAD Standard		
	e	Example 'COORDINATION MODEL' file name(s) is provided		
10.3.	Coordinate and Measurement Systems			
	a	Project Coordinate and Measurement System information matches Contract requirements		

SECTION 11: PROJECT DELIVERABLES			SUBMITTER QC	REVIEWER QA
11.1.	Contractual Project Deliverables			
	a	All Contractual deliverables have the Submittal Frequency and Format information provided		
11.2.	Project Deliverables For Elective Model Uses			
	a	EACH Elective Model Use added to the table has the Submittal Item, Frequency and Format information provided		
SUBMITTER: If you answered 'No', provide details in the SUBMITTER QCC block on Page 5. REVIEWER: If you evaluated a check as 'PWC' or 'Fail', provide details in the REVIEWER QAR block on Page 5				

SUBMITTER QUALITY CONTROL CERTIFICATION (QCC) - Attach additional sheets as necessary

COMMENTS (Prefix detailed comments with the relevant Check Number, i.e. 5.1.a: Explanation...)

I certify that I am a qualified quality control representative for the submitting party and the preceding QC evaluation is true and correct.

Date signed

_____ **x** _____
Submitter Quality Control Representative signature

REVIEWER QUALITY ASSURANCE REVIEW (QAR) - Attach additional sheets as necessary

RECOMMENDED ACTION CODES TO BE INSERTED IN ENG FORM 4025-R , SECTION I, COLUMN i (attach additional sheets, when required)

ITEM NO. (Taken from ENG FORM 4025-R)			
ACTION CODE RECOMMENDED (See Note R4)	[ABCE]		

COMMENTS (Prefix detailed comments with the relevant Check Number, i.e. 5.1.a – PWC: comment...)

I certify that I am a qualified quality assurance representative for the Government and the preceding QA evaluation is true and correct.

Date signed

_____ **x** _____
Reviewer signature

INSTRUCTIONS

SUBMITTER S1. The Submitter (Contractor or in-house Government design team) is responsible for completing the SUBMITTER QC (Quality Control) column of the Checklist. a. The Submitter will respond to each check with 'YES' or 'NO', indicating compliance with the requirements. S2. The Submitter must sign the SUBMITTER QCC block for the approving authority to accept the Checklist. S3. The Submitter must include a completed version of this form with all PxP submittals. S4. Approval of items does not relieve the Submitter from complying with all Contract requirements.
REVIEWER R1. The Reviewer is responsible for completing the REVIEWER QA (Quality Assurance) column of the Checklist. a. An authorized technical specialist, typically the District BIM/CIM Manager or delegate, will conduct the review. b. The Reviewer will evaluate each Check as applicable and apply a 'PASS', 'FAIL', 'PASS WITH COMMENT' (PWC) or 'NOT APPLICABLE' (NA) evaluation. R2. REVIEWER QAR: The Item Number will be taken from the ENG FORM 4025-R, 'Item No. (a.)'. R3. The Reviewer will supply comments for the Submitter corresponding to any 'PWC' or 'FAIL' evaluation in the COMMENTS portion of the REVIEWER QAR block. Prefix comments with a relevant Check Number. R4. The Action Codes applicable to PxP Submittal Reviews are: 'A' – Approved as submitted. 'B' – Approved, except as noted in comments. Resubmission not required. 'C' – Approved, except as noted in comments. Resubmission required. 'E' – Disapproved. Refer to comments. R5. The Submittal should receive an Action Code based on the Reviewer evaluation of checks in the Checklist. a. Use Code 'A' when all checks receive a 'PASS' with no comments. b. Use Code 'B' when some checks receive 'PWC' on non-critical deficiencies. c. Use Code 'C' when checks receive a 'PWC' or 'FAIL' on critical deficiencies. d. Use Code 'E' when a significant amount of checks receive a 'FAIL' or the deficiencies are critical enough that a completion of the submittal review is impractical. R6. The Reviewer must sign the REVIEWER QAR block prior to returning comments and recommended Action Code to the submittal approving authority.
Points of Contact Please submit all comments and questions relating to this document to: Justin Jameson206-764-3800 justin.l.jameson@usace.army.mil Steve Hutsell206-316-3965 steve.hutsell@usace.army.mil